

# Texas Commission on Environmental Quality

## CHECKLIST WORKSHEET

### IHW CEI SUBPART BB

Reg Ent Name : \_\_\_\_\_

Date : \_\_\_\_\_

Add ID \_\_\_\_\_

Investigator Name \_\_\_\_\_

Item No.	Description	Answer	Citations	Notes
	SUBPART BB: Air Emission Standards for Equipment Leaks			
1	Is the facility exempt from the Subpart BB regulations, ? if yes explain.			
2	Does the facility have any valves, pumps, compressors, pressure relief devices, sampling connection systems, flanged pipe open-ended valve or line that contain or contact hazardous wastes greater than 10 percent organics?			
3	Is the equipment in contact with the hazardous waste at least 300 hours per calendar year?			
4	Has this equipment been marked as required by the Subpart BB Regulations?		335.112(a)(20) 335.152(a)(18) 262.34(a)(1) 335.69(a)(1) 264.1050(d) 264.1050(e) 265.1050(c) 265.1050(d)	
	RECORDKEEPING			
1	Has the identification number and type of each piece of equipment been included in the record along with the associated waste management unit?		264.1064(b)(1)(iii) 264.1064(b)(1)(ii) 264.1064(b)(1)(i) 264.1064(b)(1) 262.34(a)(1) 335.69(a)(1) 335.152(a)(18) 335.112(a)(20) 264.1064(g) 265.1064(g) 265.1064(b)(1)(iii) 265.1064(b)(1)(ii) 265.1064(b)(1)(i) 265.1064(b)(1)	
2	As stated in the Waste Analysis Plan, has the percent by weight total organics in each hazardous waste stream been documented as well as the physical state of the waste?		335.112(a)(20) 335.152(a)(18) 265.1064(b)(1)(v) 265.1064(b)(1)(iv)	

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			265.1063(d) 264.1064(b)(1)(v) 264.1064(b)(1)(iv) 335.69(a)(1) 262.34(a)(1) 264.1063(d)	
3	Is the method of compliance with the standard (ie. "monthly leak detection and repair" or "equipped with dual mechanical seals") recorded for each piece of equipment?		262.34(a)(1) 264.1064(b)(1)(vi) 335.112(a)(20) 335.152(a)(18) 335.69(a)(1) 265.1064(b)(1)(vi)	
	MONITORING			
1	Were pumps in light liquid service and valves in gas/vapor or light liquid service monitored monthly by Method 21?		335.152(a)(18) 335.69(a)(1) 262.34(a)(1) 264.1052(a) 265.1052(a) 335.112(a)(20)	
2	Were pumps in light liquid service visually inspected weekly?		335.152(a)(18) 335.69(a)(1) 262.34(a)(1) 264.1052(a)(2) 265.1052(a)(2) 335.112(a)(20)	
3	Was leak detection performed in accordance with the standards in Method 21 (40 CFR Part 60)?		265.1063(b)(3) 265.1063(b)(2) 265.1063(b)(1) 264.1063(b)(5) 264.1063(b)(4)(ii) 264.1063(b)(4)(i) 264.1063(b)(4) 264.1063(b)(3) 264.1063(b)(2) 264.1063(b)(1) 262.34(a)(1) 335.69(a)(1) 335.152(a)(18) 335.112(a)(20) 265.1063(b)(4) 265.1063(b)(5) 265.1063(b)(4)(ii) 265.1063(b)(4)(i)	

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4	If any valve was designated "unsafe-to-monitor," did the O/O prepare and adhere to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times?		335.112(a)(20) 335.152(a)(18) 335.69(a)(1) 262.34(a)(1) 264.1057(g) 265.1057(g)	
5	If any valve was designated "difficult-to-monitor," did the O/O follow a written plan that requires monitoring of the valve at least once per calendar year?		335.112(a)(20) 335.152(a)(18) 335.69(a)(1) 262.34(a)(1) 264.1057(h) 265.1057(h)	
6	If the O/O elected to comply with an alternative standard, did the O/O provide notification and conduct a performance test prior to implementing the alternative practice?		335.112(a)(20) 335.152(a)(18) 335.69(a)(1) 262.34(a)(1) 264.1061(b) 264.1061(b)(1) 264.1061(b)(2) 264.1061(c) 265.1061(b) 265.1061(c) 265.1061(b)(2) 265.1061(b)(1)	
	LEAK DETECTION AND REPAIRS			
1	For permitted facilities, has the owner/operator submitted semiannual reports as required?		264.1065(a)(4) 335.152(a)(18) 264.1065(a) 264.1065(a)(1) 264.1065(a)(2) 264.1065(a)(2)(i) 264.1065(a)(2)(ii) 264.1065(a)(2)(iii) 264.1065(a)(3)	
2	For each leak detected, was the equipment tagged?		335.69(a)(1) 335.152(a)(18) 335.112(a)(20) 262.34(a)(1) 264.1064(c) 264.1064(c)(1) 265.1064(c) 265.1064(c)(1)	
3	For detected leaks, does the inspection log contain the identification numbers, date found, dates of attempts to repair and date of repair?		335.69(a)(1) 335.152(a)(18) 335.112(a)(20)	

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IHW CEI SUBPART BB (Cont)

			262.34(a)(1) 264.1064(d)(1) 264.1064(d)(2) 264.1064(d)(3) 264.1064(d)(4) 264.1064(d)(5) 265.1064(d)(1) 265.1064(d)(2) 265.1064(d)(3) 265.1064(d)(4) 265.1064(d)(5)	
4	Was the initial attempt to repair the leak within 5 days and the repair completed in 15 days?			
5	If a delay in a repair occurred, did the equipment meet one of the conditions to allow the delay?		335.112(a)(20) 335.152(a)(18) 335.69(a)(1) 262.34(a)(1) 264.1059(a) 264.1059(b) 264.1059(c)(1) 264.1059(c)(2) 264.1059(d)(1) 264.1059(d)(2) 264.1059(e) 265.1059(a) 265.1059(b) 265.1059(c)(1) 265.1059(c)(2) 265.1059(d)(1) 265.1059(d)(2) 265.1059(e)	
A	Was the repair technically infeasible without a unit shutdown?			
B	Was the equipment isolated from the HWMU and cease to contain hazardous waste?			
C	For valves, did the owner/operator determine that the emissions from the immediate repair would be greater than the emissions resulting from the delay?			
D	For pumps, did the repair require the use of a dual mechanical seal system that included a barrier fluid system?			
E	Was the repair completed as soon as possible, but not later than 6 months after the leak was detected?			
	PUMPS, COMPRESSORS WITH DUAL MECHANICAL SEAL SYSTEMS			

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**IHW CEI SUBPART BB (Cont)**

1	Does each pump or compressor equipped with a dual mechanical seal system that includes a barrier fluid system meet the following requirements?		335.112(a)(20) 335.152(a)(18) 335.69(a)(1) 262.34(a)(1) 264.1052(d) 265.1052(d)	
A	Are the seal systems operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure?		335.112(a)(20) 335.152(a)(18) 335.69(a)(1) 262.34(a)(1) 264.1052(d)(1) 264.1052(d)(1)(i) 264.1052(d)(1)(ii) 264.1052(d)(1)(iii) 265.1052(d)(1) 265.1052(d)(1)(i) 265.1052(d)(1)(ii) 265.1052(d)(1)(iii)	
I	Are they equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device compliant with 264/5.1060, OR			
II	Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to the atmosphere?			
B	Is the barrier fluid a hazardous waste with organic concentrations that exceed 10 percent by weight?		335.152(a)(18) 335.112(a)(20) 335.69(a)(1) 262.34(a)(1) 264.1052(d)(2) 265.1052(d)(2)	
C	Is each barrier fluid system equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both?		335.112(a)(20) 335.152(a)(18) 265.1052(d)(3) 264.1052(d)(3) 262.34(a)(1) 335.69(a)(1)	
D	Is each pump visually inspected weekly for leaks from the pump seals?		335.112(a)(20) 264.1052(d)(4) 262.34(a)(1) 335.69(a)(1) 335.152(a)(18) 265.1052(d)(4)	
E	Is each sensor checked daily or, for audible alarms, monthly?		335.69(a)(1) 335.152(a)(18) 335.112(a)(20) 264.1052(d)(5)(i)	

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**IHW CEI SUBPART BB (Cont)**

			262.34(a)(1) 265.1052(d)(5)(i)	
F	Has the O/O determined a criterion based on design and operating experience that indicates the failure of the system?		264.1052(d)(5)(ii) 262.34(a)(1) 335.69(a)(1) 335.152(a)(18) 335.112(a)(20) 265.1052(d)(5)(ii)	
G	Was the initial attempt to repair any leaks made within 5 days of detection and the repair completed within 15 days?		264.1052(d)(6) 262.34(a)(1) 335.69(a)(1) 335.152(a)(18) 335.112(a)(20) 265.1052(d)(6)	
	PUMPS, COMPRESSORS, AND VALVES DESIGNATED AS NO DETECTABLE EMISSIONS			
1	For any pumps or compressors designated "no detectable emissions" the following requirements must be met to be exempt:		335.152(a)(18) 335.69(a)(1) 262.34(a)(1) 335.112(a)(20) 264.1052(e) 265.1053(i) 265.1052(e) 264.1053(i)	
A	Do they have an externally actuated shaft penetration on the pump housing?			
B	Have they operated with no detectable emissions (< 500 ppm above background)?			
C	Are they tested for compliance initially upon design and then annually thereafter?			
2	Is the designation indicated in the record for each piece of equipment and signed by the owner/operator?		335.112(a)(20) 335.152(a)(18) 335.69(a)(1) 262.34(a)(1) 264.1064(g)(2)(ii) 265.1064(g)(2)(ii)	
3	Did the record include the dates of each compliance test, the background level, and the maximum instrument reading measured?		335.112(a)(20) 335.112(a)(18) 335.391(a)(1) 262.34(a)(1) 264.1064(g)(4)(i) 264.1064(g)(4)(ii) 264.1064(g)(4)(iii) 265.1064(g)(4)(i) 265.1064(g)(4)(ii) 265.1064(g)(4)(iii)	

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## IHW CEI SUBPART BB (Cont)

	OTHER EQUIPMENT			
1	Are all compressors equipped with a dual mechanical seal system that includes a barrier fluid system?		335.152(a)(18) 335.112(a)(20) 335.69(a)(1) 265.1053(a) 265.1053 264.1053(a) 264.1053 262.34(a)(1)	
2	Is each sampling connection equipped with a closed system which either returns, recycles or transports the purged process fluids to the process or a waste management unit?		335.112(a)(20) 335.152(a)(18) 265.1055(a) 264.1055(b) 264.1055(a) 262.34(a)(1) 335.69(a)(1) 265.1055(b)	
3	For pressure relief devices:			
A	Do they operate at "no detectable emissions"?		335.112(a)(20) 265.1054(a) 264.1054(a) 262.34(a)(1) 335.69(a)(1) 335.152(a)(18)	
B	After a release event, did the device return to "no detectable emissions" status within 5 days and monitored to confirm the designation?		265.1054(b)(1) 264.1054(b)(2) 264.1054(b)(1) 262.34(a)(1) 335.69(a)(1) 335.152(a)(18) 335.112(a)(20) 265.1054(b)(2)	
4	Are all open-ended valves and lines equipped with a cap, blind flange, plug, or secondary valve and remain sealed?		335.112(a)(20) 335.152(a)(18) 335.69(a)(1) 262.34(a)(1) 264.1056(a)(2) 264.1056(b) 264.1056(c) 265.1056(a)(1) 265.1056(a)(2) 265.1056(b) 265.1056(c) 264.1056(a)(1)	
	OTHER VIOLATIONS			

CHECKLIST WORKSHEET

**IHW CEI SUBPART BB (Cont)**

1	List additional violations here			
2	List additional violations here			
3	List additional violations here			
4	List additional violations here			
5	List additional violations here			



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